DETAILED ACTION

Response to Amendment

The Amendment filed on 1/09/08, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 8, 10-15, 53-57, 59, 61-67, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700).

Regarding claims 1, 10, 53, 61, 67, and 70, Hamada teaches a light-emitting device comprising: an anode as the first electrode comprising two layers (53 & 103), wherein the anode is connected to a thin film transistor (43) through an insulating film that is formed over the TFT (43), over a substrate (102) that has an insulating surface, and under and in contact with the first electrode (53 + 103); a partition wall (2) covering an edge of the first electrode (53 + 103) and formed over the insulating film (49); a layer comprising an organic compound (104-107) formed over and in contact with the first electrode (53 + 103); and a cathode as the second electrode (108) in contact with the layer comprising an organic compound (for example, see Fig. 8). Hamada teaches the partition wall (2) comprising an organic resin layer (for example, see col. 5, lines 50-56) that contains carbon particles so that the bank itself has a light-absorbing property, wherein the partition wall made of organic resin layer has a top surface and a side surface, wherein the side surface is in contact with layer comprising an organic compound. Hamada

teaches that the partition wall (2) in Fig. 8 may be replaced by the multilayer film (24) which inherently absorbs light (see col. 9, lines 48-51).

Hamada does not specifically teach the partition wall comprising a laminate of a separate organic resin layer and the light absorbing multilayer covering the top surface of the organic resin (see Fig. 8). However, Friend discloses an organic EL device having a similar structure and teaches that the partition wall itself can be made of a light absorbing material (like the one taught by Hamada) or it could have a light absorbing layer deposited over the partition wall and patterned at the same time as the partition wall (for example, see col. 6, lines 53-58). It would have been obvious to one having ordinary skills in the art at the time the invention was made to form the partition wall of a separate organic resin layer with a light absorbing layer covering the entire top surface thereof, since Friend teaches that such a construction as an alternative to an integral structure. Furthermore, it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

Regarding claims 2 and 54, the partition wall covers other regions than a light emitting region in which the first electrode and the organic compound-containing layer are in contact with each other and laid on top of each other (see Fig. 8).

Regarding claims 3, 5, 55, and 57, Hamada teaches the multilayer film including a layer that comprises silicon oxide (see col. 7, lines 9-11).

Regarding claims 4 and 56, Hamada teaches the multilayer film including a layer that comprises silicon nitride (layer 12) (see col. 6, lines 43-47).

Regarding claims 8 and 11, Hamada and Friend only show a bottom-emitting type EL device, and as such does not specifically teach the first electrode being a light transmissive

cathode. However, it is well known in the art that organic EL displays can be of the top-emitting type or bottom-emitting type, simply by reversing the order of the cathode, organic EL layer, and anode. In a top-emitting type El device the cathode is formed of a conductive light transmissive material. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first electrode be a light transmissive cathode where a top-emitting device is desired.

Regarding claims 12 and 63, Hamada teaches the organic compound being a material emitting blue light (see col. lines 23-32).

Regarding claims 13-14, Hamada and Friend do not specifically teach the organic EL layer being a white light-emitting material used with a color filter or being a material emitting monochromatic light used with a color conversion layer. However, it is well known in the art that there are there three different methods of making an organic EL display a full-color display including: (1) the three color light-emitting method, as taught by Hamada, where three different types of organic EL material are used that emit lights corresponding to the three primary colors; (2) a white color method in which white light emitted by an organic EL element for emitting white light is passed through a color filter so as to be divided into the three primary colors; and (3) a color conversion method in which a monochromatic light emitting EL element emitting blue light is passed through a fluorescent dye layer and converted into red and green. The color conversion layers and color filters are located in a sealing member to protect them from outside elements. Each of the methods have different known advantages. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the types to form a full-color organic EL display.

Regarding claim 15, Hamada teaches that the organic El display device provides high-definition images. Hamada and Friend does not specifically recite the EL device used in one of the claimed devices. However, the use of color organic EL devices is such display devices as claimed is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the organic EL display device taught by Hamada in one of the claimed devices because of its ability to provide high-definition images.

Regarding claims 59 and 62, Hamada and Friend only show a bottom-emitting type EL device, and as such does not specifically teach the first electrode being a light transmissive cathode. However, it is well known in the art that organic EL displays can be of the top-emitting type or bottom-emitting type, simply by reversing the order of the cathode, organic EL layer, and anode. In a top-emitting type El device the cathode is formed of a conductive light transmissive material. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first electrode be a light transmissive cathode where a top-emitting device is desired.

Regarding claims 64-65, Hamada and Friend do not specifically teach the organic EL layer being a white light-emitting material used with a color filter or being a material emitting monochromatic light used with a color conversion layer. However, it is well known in the art that there are there three different methods of making an organic EL display a full-color display including: (1) the three color light-emitting method, as taught by Hamada, where three different types of organic EL material are used that emit lights corresponding to the three primary colors; (2) a white color method in which white light emitted by an organic EL element for emitting

white light is passed through a color filter so as to be divided into the three primary colors; and (3) a color conversion method in which a monochromatic light emitting EL element emitting blue light is passed through a fluorescent dye layer and converted into red and green. The color conversion layers and color filters are located in a sealing member to protect them from outside elements. Each of the methods have different known advantages. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the types to form a full-color organic EL display.

Regarding claim 66, Hamada teaches that the organic El display device provides high-definition images. Hamada and Friend do not specifically state that the EL device is used in one of the claimed devices. However, the use of color organic EL devices is such display devices as claimed is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the organic EL display device taught by Hamada in one of the claimed devices because of its ability to provide high-definition images.

Claims 9 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) as applied to claims 1 and 53, above, in view of Oda et al. (US 6,396,208).

Regarding claim 9, Hamada and Friend do not specifically teach the first electrode having a concave shape. However, Oda teaches the first electrode having a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency (for example, see the abstract). Accordingly, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to provide the first electrode with a concave shape in order to increase light-collection efficiency providing a brighter display.

Regarding claim 60, Hamada and Friend do not specifically teach the first electrode having a concave shape. However, Oda teaches the first electrode having a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency (for example, see the abstract). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the first electrode with a concave shape in order to increase light-collection efficiency providing a brighter display.

Claims 1-2, 4-5, 8, 10-15, 53-54, 56-57, 59, and 61-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700), and further in view of Iwase et al. (US 6,768,534).

Regarding claims 1, 4-5, 10, 53, 56, 57, and 61, Hamada teaches a light-emitting device comprising: an anode comprising two layers (53 & 103), wherein the anode is connected to a thin film transistor (43) through an insulating film that is formed over the TFT (43), over a substrate (102) that has an insulating surface, and under and in contact with the first electrode (53 + 103); a partition wall (2) covering an edge of the first electrode (53 + 103) and formed over the insulating film (49); a layer comprising an organic compound (104-107) formed over and in contact with the first electrode (53 + 103); and a cathode as the second electrode (108) in contact with the layer comprising an organic compound (for example, see Fig. 8). Hamada teaches the partition wall (2) comprising an organic resin layer (for example, see col. 5, lines 50-56) that contains carbon particles so that the bank itself has a light-absorbing property, wherein the

partition wall made of organic resin layer has a top surface and a side surface, wherein the side surface is in contact with layer comprising an organic compound.

Hamada does not specifically teach the partition wall comprising a laminate of a separate organic resin layer and the light absorbing layer covering the top surface of the organic resin (see Fig. 8). However, Friend discloses an organic EL device having a similar structure and teaches that the partition wall itself can be made of a light absorbing material (like the one taught by Hamada) or it could have a light absorbing layer deposited over the partition wall and patterned at the same time as the partition wall (for example, see col. 6, lines 53-58). It would have been obvious to one having ordinary skills in the art at the time the invention was made to form the partition wall of a separate organic resin layer with a light absorbing layer covering the entire top surface thereof, since Friend teaches that such a construction as an alternative to an integral structure. Furthermore, it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

Hamada in view of Friend does not specifically teach the light-absorbing layer (black matrix layer) comprising multiple layers. However, Iwase et al. teaches two different types of black matrix films. One comprised of a single layer and one comprising multiple layers. Iwase teaches that the multilayer film has a predetermined reflected light attenuating structure and comprises a chromium metallic layer and a light transmissive insulating layer comprising nitride. Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to reasonably contemplate the use of such a black matrix multilayer film since Iwase teaches that it has a predetermined reflected light attenuating structure and that it is a known alternative to a single layer black matrix film.

Regarding claim 2 and 54, the partition wall (2) covers other regions than a light emitting region in which the first electrode (53 + 103) and the organic compound-containing layer (104-107) are in contact with each other and laid on top of each other (see Fig. 8).

Regarding claim 12 and 63, Hamada teaches the organic compound being a material emitting blue light (see col. lines 23-32).

Regarding claims 8, 11, 59, and 62, Hamada only shows a bottom-emitting type EL device, and as such does not specifically teach the first electrode being a light transmissive cathode. However, it is well known in the art that organic EL displays can be of the top-emitting type or bottom-emitting type, simply by reversing the order of the cathode, organic EL layer, and anode. In a top-emitting type El device the cathode is formed of a conductive light transmissive material. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first electrode be a light transmissive cathode where a top-emitting device is desired.

Regarding claims 13-14 and 64-65, Hamada does not specifically teach the organic EL layer being a white light-emitting material used with a color filter or being a material emitting monochromatic light used with a color conversion layer. However, it is well known in the art that there are there three different methods of making an organic EL display a full-color display including: (1) the three color light-emitting method, as taught by Hamada, where three different types of organic EL material are used that emit lights corresponding to the three primary colors; (2) a white color method in which white light emitted by an organic EL element for emitting white light is passed through a color filter so as to be divided into the three primary colors; and (3) a color conversion method in which a monochromatic light emitting EL element emitting

blue light is passed through a fluorescent dye layer and converted into red and green. The color conversion layers and color filters are located in a sealing member to protect them from outside elements. Each of the methods have different known advantages. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the types to form a full-color organic EL display.

Regarding claims 15 and 66, Hamada teaches that the organic El display device provides high-definition images. Hamada does not specifically state that the EL device is used in one of the claimed devices. However, the use of color organic EL devices is such display devices as claimed is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the organic EL display device taught by Hamada in one of the claimed devices because of its ability to provide high-definition images.

Claims 9 and 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) in view of Iwase et al. (US 6,768,534) as applied to claims 1 and 53, above, in view of Oda et al. (US 6,396,208).

Regarding claims 9 and 60, Hamada does not specifically teach the first electrode having a concave shape. However, Oda teaches the first electrode having a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency (for example, see the abstract). Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to provide the first electrode with a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency.

Claims 1-5, 8, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) in view of Kaneda et al. (JP 2000-269473).

Regarding claims 1, 3-5, and 10, Hamada teaches a light-emitting device comprising: an anode comprising two layers (53 & 103), wherein the anode is connected to a thin film transistor (43) through an insulating film that is formed over the TFT (43), over a substrate (102) that has an insulating surface, and under and in contact with the first electrode (53 + 103); a partition wall (2) covering an edge of the first electrode (53 + 103) and formed over the insulating film (49); a layer comprising an organic compound (104-107) formed over and in contact with the first electrode (53 + 103); and a cathode as the second electrode (108) in contact with the layer comprising an organic compound (for example, see Fig. 8). Hamada teaches the partition wall (2) comprising an organic resin layer (for example, see col. 5, lines 50-56) that contains carbon particles so that the bank itself has a light-absorbing property, wherein the partition wall made of organic resin layer has a top surface and a side surface, wherein the side surface is in contact with layer comprising an organic compound.

Hamada does not specifically teach the partition wall comprising a laminate of a separate organic resin layer and the light absorbing layer covering the top surface of the organic resin (see Fig. 8). However, Friend discloses an organic EL device having a similar structure and teaches that the partition wall itself can be made of a light absorbing material (like the one taught by Hamada) or it could have a light absorbing layer deposited over the partition wall and patterned at the same time as the partition wall (for example, see col. 6, lines 53-58). It would have been obvious to one having ordinary skills in the art at the time the invention was made to form the

partition wall of a separate organic resin layer with a light absorbing layer covering the entire top surface thereof, since Friend teaches that such a construction as an alternative to an integral structure. Furthermore, it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

Hamada in view of Friend does not specifically teach the light-absorbing layer (black matrix layer) comprising multiple layers. However, Kaneda et al. teaches a multilayer light-absorbing film comprising a SiO2 layer (56), a titanium nitride layer (53), an aluminum metal layer (55), and another SiO2 layer (56) (see Fig. 1 and paragraphs 0012-0013) that provides an improved light-absorbing layer that absorbs 90% or more of reflected ambient light, protecting the transistors from degradation and eventual malfunciton. Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to use such a superior light-absorbing multilayer film in place of the single layer film disclosed in the Hamada reference in order to increase the amount of ambient light absorbed providing improved TFT protection.

Regarding claim 2, the partition wall (2) covers other regions than a light emitting region in which the first electrode (53 + 103) and the organic compound-containing layer (104-107) are in contact with each other and laid on top of each other (see Fig. 8).

Regarding claims 6-7, Kaneda teaches the SiO2 layers (56 and 54) being replaced with silicon nitride in order to increase the light absorption even further (to about 99%) (see for example paragraph 0016).

Regarding claim 12, Hamada teaches the organic compound being a material emitting blue light (see col. lines 23-32).

Regarding claims 8 and 11, Hamada only shows a bottom-emitting type EL device, and as such does not specifically teach the first electrode being a light transmissive cathode. However, it is well known in the art that organic EL displays can be of the top-emitting type or bottom-emitting type, simply by reversing the order of the cathode, organic EL layer, and anode. In a top-emitting type El device the cathode is formed of a conductive light transmissive material. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first electrode be a light transmissive cathode where a top-emitting device is desired.

Regarding claims 13-14, Hamada, Friend, and Kaneda do not specifically teach the organic EL layer being a white light-emitting material used with a color filter or being a material emitting monochromatic light used with a color conversion layer. However, it is well known in the art that there are there three different methods of making an organic EL display a full-color display including: (1) the three color light-emitting method, as taught by Hamada, where three different types of organic EL material are used that emit lights corresponding to the three primary colors; (2) a white color method in which white light emitted by an organic EL element for emitting white light is passed through a color filter so as to be divided into the three primary colors; and (3) a color conversion method in which a monochromatic light emitting EL element emitting blue light is passed through a fluorescent dye layer and converted into red and green. The color conversion layers and color filters are located in a sealing member to protect them from outside elements. Each of the methods have different known advantages. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the types to form a full-color organic EL display.

Regarding claim 15, Hamada teaches that the organic El display device provides high-definition images. Hamada does not specifically state that the EL device is used in one of the claimed devices. However, the use of color organic EL devices is such display devices as claimed is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the organic EL display device taught by Hamada in one of the claimed devices because of its ability to provide high-definition images.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) in view of Kaneda et al. (JP 2000-269473) as applied to claim 1, above, in view of Oda et al. (US 6,396,208).

Regarding claim 9, Hamada and Kaneda do not specifically teach the first electrode having a concave shape. However, Oda teaches the first electrode having a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency (for example, see the abstract). Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to provide the first electrode with a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency.

Claims 23-27, 29, 31-36, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) in view of Kaneda et al. (JP 2000-269473).

Regarding claims 23, 25-27, 31, and 68, Hamada teaches a light-emitting device comprising: an anode comprising two layers (53 & 103), wherein the anode is connected to a thin film transistor (43) through an insulating film that is formed over the TFT (43), over a

substrate (102) that has an insulating surface, and under and in contact with the first electrode (53 + 103); a partition wall (2) covering an edge of the first electrode (53 + 103) and formed over the insulating film (49); a layer comprising an organic compound (104-107) formed over and in contact with the first electrode (53 + 103); and a cathode as the second electrode (108) in contact with the layer comprising an organic compound (for example, see Fig. 8). Hamada teaches the partition wall (2) comprising an organic resin layer (for example, see col. 5, lines 50-56) that contains carbon particles so that the bank itself has a light-absorbing property, wherein the partition wall made of organic resin layer has a top surface and a side surface, wherein the side surface is in contact with layer comprising an organic compound.

Hamada does not specifically teach the partition wall comprising a laminate of a separate organic resin layer and the light absorbing layer covering the top surface of the organic resin (see Fig. 8). However, Friend discloses an organic EL device having a similar structure and teaches that the partition wall itself can be made of a light absorbing material (like the one taught by Hamada) or it could have a light absorbing layer deposited over the partition wall and patterned at the same time as the partition wall (for example, see col. 6, lines 53-58). It would have been obvious to one having ordinary skills in the art at the time the invention was made to form the partition wall of a separate organic resin layer with a light absorbing layer covering the entire top surface thereof, since Friend teaches that such a construction as an alternative to an integral structure. Furthermore, it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

Hamada in view of Friend does not specifically teach the light-absorbing layer (black matrix layer) comprising multiple layers. However, Kaneda et al. teaches a multilayer light-

absorbing film comprising a SiO2 layer (56), a titanium nitride layer (53), an aluminum metal layer (55), and another SiO2 layer (56) (see Fig. 1 and paragraphs 0012-0013) that provides an improved light-absorbing layer that absorbs 90% or more of reflected ambient light, protecting the transistors from degradation and eventual malfunction. Kaneda teaches a layer of silicon nitride between the interface of the titanium nitride film and the SiO2 layer in order to increase the light absorption even further (to about 99%) (see for example paragraph 0016). Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to use such a superior light-absorbing multilayer film, which includes at least three layers of different materials, in place of the single layer film disclosed in the Hamada reference in order to increase the amount of ambient light absorbed providing improved TFT protection.

Regarding claim 24, the partition wall (2) covers other regions than a light emitting region in which the first electrode (53 + 103) and the organic compound-containing layer (104-107) are in contact with each other and laid on top of each other (see Fig. 8).

Regarding claim 33, Hamada teaches the organic compound being a material emitting blue light (see col. lines 23-32).

Regarding claims 29 and 32, Hamada only shows a bottom-emitting type EL device, and as such does not specifically teach the first electrode being a light transmissive cathode. However, it is well known in the art that organic EL displays can be of the top-emitting type or bottom-emitting type, simply by reversing the order of the cathode, organic EL layer, and anode. In a top-emitting type El device the cathode is formed of a conductive light transmissive material. Accordingly, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to have the first electrode be a light transmissive cathode where a top-emitting device is desired.

Regarding claims 34-35, Hamada and Kaneda do not specifically teach the organic EL layer being a white light-emitting material used with a color filter or being a material emitting monochromatic light used with a color conversion layer. However, it is well known in the art that there are there three different methods of making an organic EL display a full-color display including: (1) the three color light-emitting method, as taught by Hamada, where three different types of organic EL material are used that emit lights corresponding to the three primary colors; (2) a white color method in which white light emitted by an organic EL element for emitting white light is passed through a color filter so as to be divided into the three primary colors; and (3) a color conversion method in which a monochromatic light emitting EL element emitting blue light is passed through a fluorescent dye layer and converted into red and green. The color conversion layers and color filters are located in a sealing member to protect them from outside elements. Each of the methods have different known advantages. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the types to form a full-color organic EL display.

Regarding claim 36, Hamada teaches that the organic El display device provides high-definition images. Hamada does not specifically state that the EL device is used in one of the claimed devices. However, the use of color organic EL devices is such display devices as claimed is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the organic EL display device

taught by Hamada in one of the claimed devices because of its ability to provide high-definition images.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (US 6,114,715) in view of Friend et al. (US 6,518,700) in view of Kaneda et al. (JP 2000-269473) as applied to claim 23, above, in view of Oda et al. (US 6,396,208).

Regarding claim 30, Hamada , Friend, and Kaneda do not specifically teach the first electrode having a concave shape. However, Oda teaches the first electrode having a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency (for example, see the abstract). Accordingly, it would have been obvious to one of ordinary skill at the time the invention was made to provide the first electrode with a concave shape so as to utilize the reflection of concave electrode for improving light-collection efficiency.

Allowable Subject Matter

Claims 7 and 58 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 37-52 and 69 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or fairly suggest:

- A partition wall that includes a light absorbing multilayer film comprising a laminate of a metal film mainly composed of aluminum, a silicon nitride film, a titanium nitride film, and another silicon nitride film, in combination with the remaining claimed limitations as called for in claims 7 and 58;

- A partition wall that includes a light absorbing multilayer film comprising a laminate including a reflective metal film, a first light transmissive insulating film comprising nitride, a metal nitride film, and a second light transmissive insulating film comprising nitride, in combination with the remaining claimed limitations as called for in claim 37 (claims 38-41, 43-52, and 69 are allowable for the same reasons since they are dependent on claim 37).

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is **(571) 272-2459**. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. **The fax phone number for this Group is (571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 28, 2008

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